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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/716,437

11/20/2003

Tomaso Vercellotti

2247-114

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7590

12/12/2006

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EXAMINER

PATEL, NIHIR B

ART UNIT

PAPER NUMBER

3772

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/716,437	<b>Applicant(s)</b> VERCELLOTTI ET AL.	
	<b>Examiner</b> Nihir Patel	<b>Art Unit</b> 3772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06.29.2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 9, 12, 15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 is/are allowed.
- 6) ☒ Claim(s) 12, 15 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed on June 29, 2006, with respect to claims 9, 12, 15 and 16 have been fully considered and are persuasive. The rejection(s) of the previous office action has been withdrawn.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims **12, 15 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hood (US 5,342,380).
5. **As to claims 12**, Hood substantially teaches a method step of providing a surgical treatment by means of a tip set in vibration at a frequency in the ultrasound range, wherein the vibration of the tip is modulated with low frequency pulses to produce an extremely fine and precise cut in the bone tissue (**see column 15 lines 1-20**) but does not disclose that the

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instrument is used for extraction of impacted third molars in the vicinity of the dental alveolus. The applicant's specification has does not establish any criticality on why the instrument should be used for extraction of impacted third molars in the vicinity of the dental alveolus and therefore it's a matter of design choice. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide an instrument for cutting various types of tissue as stated by Hood (**see column 1 lines 11-25**). The usage of the instrument is based the patient's criteria and therefore it is considered to be a matter of design choice on where to use the instrument.

6. **As to claims 15**, Hood substantially teaches a method step of providing a surgical treatment by means of a tip set in vibration at a frequency in the ultrasound range, wherein the vibration of the tip is modulated with low frequency pulses to produce an extremely fine and precise cut in the bone tissue (**see column 15 lines 1-20**) but does not disclose that the instrument is used for vertebral laminectomy treatments. The applicant's specification has not established any criticality on why the instrument should be used for vertebral laminectomy treatments and therefore it's a matter of design choice. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide an instrument for cutting various types of tissue as stated by Hood (**see column 1 lines 11-25**). The usage of the instrument is based the patient's criteria and therefore it is considered to be a matter of design choice on where to use the instrument.

7. **As to claim 16**, Hood substantially teaches a method step of providing a surgical treatment by means of a tip set in vibration at a frequency in the ultrasound range, wherein the vibration of the tip is modulated with low frequency pulses to produce an extremely fine and precise cut in the bone tissue (**see column 15 lines 1-20**) but does not disclose that the

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instrument is used for hand and foot bone surgery. The applicant's specification has not established any criticality on why the instrument should be used for hand and bone surgery and therefore it's a matter of design choice. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide an instrument for cutting various types of tissue as stated by Hood (**see column 1 lines 11-25**). The usage of the instrument is based the patient's criteria and therefore it is considered to be a matter of design choice on where to use the instrument.

***Allowable Subject Matter***

8. Claim 9 is allowed. The prior art does not teach or disclose a method step of a horizontal crestal incision on edentulous ridge, by a chisel tip operated by ultrasound, so that it performs an extremely precise and fine incision, widening of the incision, by means of a chisel tip, with widened point, operated by ultrasound, to separate the vestibular cortical bone wall from the palatal one, creation of at least one implant site on the bottom of the widened horizontal crestal incision by means of an osteotome tip operated by ultrasound, positioning the implants in the implant sites respectively.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nihir Patel whose telephone number is (571) 272-4803. The examiner can normally be reached on 7:30 to 4:30 every other Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Nihir Patel



12/10/12